

REMARKS

Applicants appreciate the Office's review of the present application. In response to the Office Action, the cited references have been reviewed, and the rejections and objections made to the claims by the Examiner have been considered. The claims presently on file in the present application are believed to be patentably distinguishable over the cited references, and therefore allowance of these claims is earnestly solicited.

In order to render the claims more clear and definite, and to emphasize the patentable novelty thereof, claims 1-2, 5, 17, 23-24, 28, and 31-32 have been amended, claims 9-11 and 15 have been cancelled without prejudice, and new claims 36-44 have been added. Support for any claim amendments and new claims is found in the specification, claims, and drawings as originally filed, and no new matter has been added. Accordingly, all claims presently on file in the subject application are in condition for immediate allowance, and such action is respectfully requested.

Rejections

Rejection Under 35USC §112 Second Paragraph

Claim 5 has been rejected under 35 USC §112, paragraph 2, as being indefinite for failing to particularly point and distinctly claim the subject matter which the Applicant regards as the invention. In response, claim 5 has been amended to more clearly recite storing the categorization.

In view of the foregoing, it is submitted that the rejections under 35 USC §112, paragraph 2, have been overcome and should be withdrawn.

Rejection Under 35USC §102

Claims 1-7, 12-13, 16, 20-21, 23-27, 29-31, 33, and 35 have been rejected under

35 USC §102(e), as being anticipated by U.S. patent 6,542,173 to Buckley ("Buckley"). Applicants respectfully traverse the rejection and request reconsideration based on the amendment to claims 1-2, 5, and 23-24, and features in the claims which are neither disclosed nor suggested in the cited reference.

As to a rejection under §102, "[a]nticipation is established only when a single prior art reference discloses expressly or under the principles of inherence, each and every element of the claimed invention." *RCA Corp. v. Applied Digital Data Systems, Inc.*, (1984, CAFC) 221 U.S.P.Q. 385. The standard for lack of novelty, that is for "anticipation," is one of strict identity. To anticipate a claim, a patent or a single prior art reference must contain all of the essential elements of the particular claims. *Schroeder v. Owens-Corning Fiberglass Corp.*, 514 F.2d 901, 185 U.S.P.Q. 723 (9th Cir. 1975); and *Cool-Fin Elecs. Corp. v. International Elec. Research Corp.*, 491 F.2d 660, 180 U.S.P.Q. 481 (9th Cir. 1974). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

The rejection of independent claim 1, and its dependent claims 2-7, 12-13, and 16, is respectfully traversed at least because the single cited reference does not disclose all of the essential elements of the claims arranged as required by the claims and in as complete detail as in the claims. In this regard, claim 1 recites:

"1. (Currently amended) A method for controlling printing of a document, comprising: processing the document to form a print job including print data, the print data including drawing commands; analyzing the drawing commands to build statistical information about content within the print data; and categorizing the print job using the statistical information according to pre-specified categorization criteria." (emphasis added)

The Buckley reference discloses systems and methods that "define rendering parameter options for rendering the objects of a document based on an identified document type,

irrespective of the object types of that document's objects", and which "determine a document's predominant object and apply rendering parameter options to that document's objects based on the determined predominant object type" in order to consume fewer computational or time resources during rendering (Abstract; col. 2, lines 31-35; emphasis added). With regard to document objects, the Buckley reference teaches that

"many documents have a large number of independent text objects, with a relatively small number of graphics type objects and/or photo type objects appearing in the document. Thus, determining the object type of each of the independent objects and applying different rendering techniques based on each object's determined object type is unnecessarily resource and time consuming. Rather, for such documents, it is often sufficient to merely identify a document type for that document, with a predetermined set of rendering techniques to be applied to all of the objects within that document based on the determined document type. In other situations, such as printing an HTML document from an accessed website, a user may be interested in one type of object, such as the text objects, the bitmap objects, the photograph objects or the graphics objects, to the exclusion of the other types of objects. For example, the user may be interested in the text of an article on a newspaper website and thus does not care whether the non-text objects within that web page are optimally rendered. In these examples, optimally rendering each of the various independent objects within the document may unnecessarily consume valuable computational and/or time resources in order to print at an optimized quality level objects whose quality the user is indifferent to." (col. 2, lines 12-35; emphasis added)

Accordingly, the Buckley reference considers "objects" to be various portions or features of a document as visualized after they are rendered. More particularly, the Buckley reference teaches that the document is analyzed before its objects are rendered in order to select the document's predominant object type, which subsequently is "stored in the document-type definition memory portion 132" (col. 8, lines 22-23). Then, after the document's predominant object type has been determined,

"The printer driver, using the defined rendering parameter options of the selected document type stored in the document-type definition memory portion 132, converts the currently opened document into printer data and printer control commands and outputs the printer data and printer control commands through the input/output interface 110, the links 302 and 312 and the print server 300 to the currently selected printer 310." (col. 8, lines 28-35)

Conversely, as recited in Applicants' claim 1, the document is processed to form the print data and the drawing commands before the print job is categorized. Furthermore, Applicants'

claim 1 recites that it is the drawing commands, produced after the document is processed to form the print job, that are analyzed to build the statistical information about content within the print data that allows the print job to be categorized. This is unlike the Buckley reference, which teaches that the currently opened document is converted into printer data and printer control commands only after the predominant object type of the document is selected (i.e. after the document is categorized).

There is no teaching in the Buckley reference that the drawing commands, which are included in the print data that is generated when the document is processed to form the print job, are utilized to determine the predominant object type. The Office appears to believe that the Buckley reference discloses drawing commands at col. 11, line 66 – col. 12, line 14. Applicants respectfully disagree, and note that this section of the Buckley reference makes no reference to drawing commands (i.e. printer control commands, as cited above in col. 8, lines 28-35). Instead, the Buckley reference at col. 11, line 66 – col. 12, line 14 merely discloses that documents may include text, graphics, and photographic objects. As discussed above, these objects merely refer to features of the document that can be visualized after the objects are rendered.

The novel features of the present invention are not anticipated by the Buckley reference in that the above-referenced essential elements, arranged as required by the claims and recited in as complete detail as in the claim, is absent from the reference. Therefore, the rejection is improper at least for that reason and should be withdrawn.

Independent claim 23 (currently amended) recites limitations similar to those of claim 1, discussed above. Claim 23 recites:

“23. (Currently amended) In a system for electronically monitoring the contents of a print job generated from a document, a computer-readable medium having computer-executable instructions for performing a process on a computer, the process comprising:
processing the document to form the print job including print data, the print data including drawing commands;

statistically analyzing the print data to form object type percentages using the drawing commands;

classifying the print job using the statistical analysis and according to pre-specified categorization criteria; and

storing the classification in a log file and using the classification from the log file for examination and for building, enhancing and verifying future classification matches.” (emphasis added)

For similar reasons as explained heretofore with regard to claim 1, the Buckley reference does not use drawing commands in the statistical analysis of the print data that is used to classify the print job. As explained heretofore, the drawing commands are not generated according to the Buckley reference until after the predominant object type has been determined. It would be impossible for the print job of the Buckley reference to be classified based on non-existent drawing commands.

The novel features of the present invention are not anticipated by the Buckley reference in that at least one essential element, arranged as required by the claim and in as complete detail as in the claim, is absent from the reference. Therefore, the rejection of independent claim 23, and its corresponding dependent claims 24-26, is improper at least for this reason and should be withdrawn.

The rejection of independent claim 33, and its dependent claim 35, is respectfully traversed at least because the single cited reference does not disclose all of the essential elements of the claims arranged as required by the claims and in as complete detail as in the claims. In this regard, claim 33 recites:

“33. (Original) A method for managing print jobs of documents containing at least one page, comprising:

collecting drawing commands for a given page;

collapsing the collected drawing commands into pre-determined categories; and

classifying the print job using the pre-determined classifications.” (emphasis added)

For similar reasons as discussed extensively above with reference to claim 1, the Buckley reference does not classify a print job (i.e. determine the predominant object type) based on

drawing commands. As explained heretofore, the drawing commands are not generated according to the Buckley reference until after the predominant object type has been determined. It would be impossible for the print job of the Buckley reference to be classified based on non-existent drawing commands.

The novel features of the present invention are not anticipated by the Buckley reference in that the above-referenced essential elements, arranged as required by the claims and recited in as complete detail as in the claim, is absent from the reference. Therefore, the rejection is improper at least for that reason and should be withdrawn.

Independent claim 27 (original) recites limitations similar to those of claim 33, discussed above. Therefore, for similar reasons as explained heretofore with regard to claim 33, the novel features of the present invention are not anticipated by the Buckley reference in that at least one essential element, arranged as required by the claim and in as complete detail as in the claim, is absent from the reference. Therefore, the rejection of independent claim 27 is improper at least for this reason and should be withdrawn.

Inappropriateness of Finality of the Next Office Action

Applicants respectfully note that the rejections under §102 of dependent claims 20-21 and 29-31 are deficient on their face. Claims 20-21 depend from independent claim 17, which stands rejected under §103(a). Similarly, claims 29-31 depend from independent claim 28, which also stands rejected under §103(a).

In addition, while the Office Action Summary indicates that claim 34 is rejected, there is no rejection of, or other action taken with respect to, dependent claim 34 in the Detailed Action. As such, Applicants have no basis for responding.

In the absence of conditions such as misjoinder or fundamental defects in the application (conditions which do not exist here), 37 C.F.R. §1.104(b) requires that the “examiner’s action will be complete as to all matters”. Because there is no support for the rejection of claim 34, and

no rejection of dependent claims 20-21 and 29-31 that is not deficient on its face, Applicants believe that the present Office Action is not complete. Accordingly, Applicants respectfully request that, if all claims are not deemed allowable in response to the present amendment, the next subsequent Office Action be made non-final.

Rejection Under 35USC §103

Claims 8, 17-19, 28, and 32 have been rejected under 35 USC §103(a), as being unpatentable over U.S. patent 6,542,173 to Buckley ("Buckley"). Applicants respectfully traverse the rejection and request reconsideration.

As to a rejection under §103(a), the U.S. Patent and Trademark Office ("USPTO") has the burden under §103 to establish a *prima facie* case of obviousness by showing some objective teaching in the prior art or generally available knowledge of one of ordinary skill in the art that would lead that individual to the claimed invention. See *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The Manual of Patent Examining Procedure (MPEP) section 2143 discusses the requirements of a *prima facie* case for obviousness. That section provides as follows:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and reasonable expectation of success must be found in the prior art, and not based on applicant's disclosure.

The rejection of independent claim 17, and its dependent claims 18-19, is respectfully traversed for at least the following reasons. Claim 17 recites:

"17. (Currently amended) A system for managing printing operations on a computer, comprising:

an application program that generates drawing commands for printing a document;
a statistical module that collects the drawing commands and collapses the collected drawing commands into pre-determined classifications; and
a filtering module coupled to the statistical module that filters the pre-determined classifications using pre specified category criteria and categorizes the print job into at least one predefined print job category.” (emphasis added)

The Office has not established a *prima facie* case of obviousness at least because the applied references do not teach or suggest all of Applicant’s claim limitations.

For similar reasons as explained heretofore with reference to claim 1, the Buckley reference does not teach or suggest collecting and collapsing drawing commands in order to categorize a print job (i.e. to determine the predominant object type). As recited in claim 17, the application program generates the drawing commands before the print job is categorized, and the generated drawing commands are then used to perform the categorization . However, as explained with reference to claim 1, the Buckley reference teaches that the drawing commands are not generated until after the predominant object type (i.e. the category) has already been determined.

Therefore, for the reasons discussed herein, the applied references do not teach or suggest all of Applicant’s claim limitations.

Furthermore, the Office has not established a *prima facie* case of obviousness at least because there is no suggestion or motivation to modify the reference. The Office does not state a motivation for modifying the Buckley reference. Moreover, the Buckley reference itself teaches away from the modification. If the Buckley reference were to be modified such that no predominant object type is identified before the currently opened document is converted into printer data and printer control commands, then the various text, graphics, and photographic objects in the document would necessarily each be rendered according to the optimal rendering technique associated with the corresponding object type, which would be “unnecessarily resource and time consuming” (col. 2, lines 12-35).

Applicants respectfully traverse the Office’s assertion that it would have been obvious to

a person of ordinary skill in the art at the time the invention was made to include the features recited in the claims of Applicants' invention. Such could be possible only in hindsight and in light of Applicants' teachings. Therefore, the rejection is improper at least for that reason and should be withdrawn.

Independent claim 28 recites limitations similar to those of claim 17, discussed above.

Claim 28 recites:

“28. (Currently amended) A printing system working in a computer environment, comprising:

an application program that generates print data for a print job, the print data including drawing commands;

a printer that receives the print data for printing the print jobs;

a software printer driver coupled to the printer and application program for analyzing the drawing commands to build statistical information about content within the print data; and

a filter module coupled to the software printer driver for categorizing the print job using the statistical information according to pre-specified categorization criteria.” (emphasis added)

For similar reasons as explained heretofore with regard to claim 17, the features of the present invention are not taught or suggested by the cited references in that the features of analyzing drawing commands within print data generated by an application program in order to categorize a print job are neither taught nor suggested by the Buckley reference. In addition, there is no motivation to modify the reference, also for similar reasons as explained with regard to claim 17.

Applicants respectfully traverse the Office's assertion that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the features recited in the claims of Applicants' invention. Such could be possible only in hindsight and in light of Applicants' teachings. Therefore, the rejection of independent claim 28, and its corresponding dependent claim 32, is improper at least for that reason and should be withdrawn.

The rejection of dependent claim 8 is respectfully traversed based on the dependence of

this claim from independent claim 1, whose reasons for allowability over the Buckley reference have been discussed heretofore. Any motivation to modify the reference is improper in that it impermissibly uses the Applicants' disclosure as a blueprint or in hindsight for the rejection. Therefore, the rejection is improper at least for these reasons and should be withdrawn.

Claims 14 and 22 have been rejected under 35 USC §103 (a), as being unpatentable over U.S. patent 6,542,173 to Buckley ("Buckley") in view of U.S. patent 5,323,393 to Barrett ("Barrett"). Applicants respectfully traverse the rejection and request reconsideration at least based on the dependence of these claims on independent claims 1 and 17 respectively, whose reasons for allowability over the Buckley reference have been discussed heretofore and against which the Barrett reference has not been cited. Any motivation to combine or modify the references is improper in that it impermissibly uses the Applicants' disclosure as a blueprint or in hindsight for the rejection. Therefore, the rejection is improper at least for these reasons and should be withdrawn.

Conclusion

Attorney for Applicant(s) has reviewed each one of the cited references made of record and not relied upon, and believes that the claims presently on file in the subject application patentably distinguish thereover, either taken alone or in combination with one another.

Therefore, all claims presently on file in the subject application are in condition for immediate allowance, and such action is respectfully requested. If it is felt for any reason that direct communication with Applicant's attorney would serve to advance prosecution of this case to finality, the Examiner is invited to call the undersigned Robert C. Sismilich, Esq. at the below-listed telephone number.

**AUTHORIZATION TO PAY AND PETITION
FOR THE ACCEPTANCE OF ANY NECESSARY FEES**

If any charges or fees must be paid in connection with the foregoing communication (including but not limited to the payment of an extension fee or issue fees), or if any overpayment is to be refunded in connection with the above-identified application, any such charges or fees, or any such overpayment, may be respectively paid out of, or into, the Deposit Account No. 08-2025 of Hewlett-Packard Company. If any such payment also requires Petition or Extension Request, please construe this authorization to pay as the necessary Petition or Request which is required to accompany the payment.

Respectfully submitted,



Robert C. Sismilich
Reg. No. 41,314
Attorney for Applicant(s)
Telephone: (858) 547-9803

Date: 10/30/06

Hewlett-Packard Company
Intellectual Property Administration
P. O. Box 272400
Fort Collins, CO 80527-2400